

**REMARKS**

In the February 3, 2008 final Office Action<sup>1</sup>, the Examiner objected to claim 16; rejected claims 25, 27, 28, 32, 33, 36, 50, and 51 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,008,717 to Bar-Jospeh et al. ("Bar-Joseph"); and indicated that claims 16-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

By this amendment, Applicants propose to cancel claim 16 without prejudice or disclaimer, and amend claims 17, 19, 20, 23, and 50. Claims 17-51 will be pending upon entry of this amendment, with claims 38-49 withdrawn from consideration.

**Objection of Claim 16**

The cancellation of claim 16 renders moot the objection to claim 16. However, in order to place the application in condition for allowance, Applicants have incorporated the subject matter of claim 16 into independent claim 50 and have made changes pursuant to the Examiner's suggestions. Accordingly, Applicants respectfully request that the Examiner's objection of claim 16 be withdrawn.

**Rejection under 35 U.S.C. § 102(b)**

Applicants respectfully traverse the rejection of claims 25, 27, 28, 32, 33, 36, 50, and 51 under 35 U.S.C. § 102(b) as being anticipated by Bar-Joseph.

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<sup>1</sup> The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statements is identified herein, Applicants decline to automatically subscribe to any statement of characterization in the Office Action.

respectfully traverse the rejection of claims 25, 27, 28, 32, 33, 36, 50, and 51, and respectfully submit that Applicants have cancelled claim 16 and amended claim 50 to include subject matter that was indicated to be allowable on page 2 of the final Office Action. Therefore, claim 50 and dependent claims 25, 27, 28, 32, 33, 36, and 51 include allowable subject matter.

Accordingly, claims 25, 27, 28, 32, 33, 36, 50, and 51 are in condition for allowance.

**Rejoinder of withdraw claims 38-49**

In a restriction requirement dated April 29, 2008, the Examiner asserted that claims 15-37 and 38-49 do not relate to a single general inventive concept. See Restriction Requirement, page 2. M.P.E.P. § 1893.03(d) states:

If an examiner (1) determines that the claims lack unity of invention and (2) requires election of a single invention, **when all of the claims drawn to the elected invention are allowable** (i.e., meet the requirements of 35 U.S.C. 101, 102, 103 and 112), **the nonelected invention(s) should be considered for rejoinder**. Any nonelected product claim that requires all the limitations of an allowable product claim, and any nonelected process claim that requires all the limitations of an allowable process claim, should be rejoined. (Emphasis added).

Withdrawn independent claim 38 recites a “a fifth semiconductor layer having the first and the third semiconductor clad layers on the substrate side, which is arranged between the first semiconductor clad layer and the third semiconductor clad layer, **containing a p-type dopant and whose band gap is greater than that of the semiconductor core layer,**” (emphasis added), and withdrawn independent claim 46 recites “a fifth semiconductor layer in which the third semiconductor clad layer and the first semiconductor clad layer are arranged on the substrate side and a p-type dopant is

contained between the second semiconductor clad layer and **the fourth semiconductor clad layer and whose band gap is greater than that of the semiconductor core layer,**" (emphasis added). Thus, independent claims 38 and 48, and their corresponding dependent claims include allowable subject. Accordingly, Applicants respectfully request rejoinder and allowance of withdrawn claims 38-49.

### **CONCLUSION**

Applicant respectfully requests that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing the claims in condition for allowance. Applicant submits that the proposed amendments of the claims do not raise new issues or necessitate the undertaking of any additional search of the art by the Examiner, since all of the elements and their relationships claimed were claimed earlier in the claims as examined. Therefore, this Amendment should allow for immediate action by the Examiner.

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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By: 

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